PAGE 03/08

- 1. (Currently amended) A windmill apparatus comprising: windmill means mounted to a windmill shaft to rotate said shaft in response to air flow
 - through said windmill means; the windmill means comprising multiple sets of three windmill blades, said blades in a set being attached to one another and mounted to a single hub, wherein the blades of each set of windmill blades are positioned at different angles to one another.
- 2. (Canceled) The windmill apparatus of Claim 1 wherein the blades in each set of windmill blades are interconnected with braces.
- 3. (Canceled) The windmill apparatus of Claim 1 wherein the blades of each set of windmill blades are positioned at different angles to one another.
- 4. (currently amended) The windmill apparatus of Claim 1 A windmill apparatus comprising: windmill means mounted to a windmill shaft to rotate said shaft in response to air flow through said windmill means; the windmill means comprising multiple sets of three windmill blades, said blades in a set being attached to one another and mounted to a single hub, wherein the blades of each set of windmill blades are predominantly flat, of uniform cross-section, have a central portion ending in tips, and have a lip at one tip; the blades in a set further comprise a first blade that has a cord length "X" measured from tip to tip on a line parallel to the plane of the central portion; a second blade somewhat smaller in overall length than the first blade; and a third blade somewhat smaller in overall length than the second blade; the blades are positioned with respect to one another such that the center of the central portion of the first blade is spaced approximately 50% of the blade cord length "X" from the center to the center of the central portion of the second blade; and the second blade is positioned with respect to the third blade such that the center of the central portion of the second blade is spaced approximately 50% of the second blade's cord length from the center to the center of the central portion of the third blade; the second blade is positioned with respect to the first blade with a 15 degree increased angle of attack greater than the angle of attack of the first blade to the direction of wind through the windmill; a tip of the second blade is positioned approximately 1/10th of the cord length "X" back from a tip on the first blade

on a line taken perpendicular to the line parallel to the cord length "X"; said line passing through said tip on said first blade; the cord length of the second blade is approximately 70% of "X" and the third blade is dimensioned and positioned with respect to the second blade, with the same ratios as given with respect to the first and second blades

5. (canceled) A windmill apparatus comprising:

windmill means mounted to a windmill shaft to rotate said shaft in response to air flow through said windmill means; the windmill means comprising multiple sets of three windmill blades and wherein the windmill shaft is connected to a machine to provide motive power to said machine and wherein the machine is an air propelled vehicle, comprising: an air propulsion means to propel said vehicle;

said air propulsion means having a source of power to drive the air propulsion means;

a power transfer means engaging said source of power;

a first clutch means for engaging said power transfer means in a selected condition:

and said windmill means provides enhanced propulsion to said vehicle when engaging said first clutch means in said selected condition.

- 6. (canceled) The vehicle described in Claim 5 further comprising:
 - second clutch means coacting with said source of power to disengage said source of power from driving said propulsion means when said windmill means provides propulsion which exceeds that of the source of power.
- 7. (canceled) The vehicle of Claim 5 wherein the multiple sets of blades are attached to multiple hubs in said windmill means.
- 8. (canceled) The vehicle of Claim 5 wherein the blades in each set of windmill blades are interconnected with braces.
- 9. (canceled) The vehicle of Claim 5 wherein the air propulsion means comprises a propeller.
- 10. (canceled) The vehicle of Claim 5 wherein the air propulsion means comprises two

propellers.

- 11. (canceled) The vehicle of Claim 5 wherein the source of power is a motor.
- 12. (canceled) The vehicle of Claim 5 where the power transfer means is a shaft.
- 13. (canceled) The windmill apparatus of Claim 4 wherein the machine is a compressor apparatus comprising:

multiple double-acting piston/cylinder means each having a piston operating within a cylinder to compress air upon movement of the piston within the cylinder;

each of said cylinders having a piston shaft connected to said piston therein; said piston shaft extending from said cylinder;

drive means connecting said piston shafts to said windmill shaft to drive said piston shafts in response to rotation of said windmill shaft; and conduit means connected to the piston/cylinder means to permit the flow of air into said cylinders to receive compressed air from said cylinders.

- 14. (canceled) The windmill compressor apparatus of Claim 13 further comprising positioning the multiple double-acting piston/cylinder means such that the cylinders are radially space from one another.
- 15. (canceled) A windmill compressor apparatus as set forth in Claim 13 wherein said cylinders are of different diameters.
- 16. (canceled) The windmill compressor apparatus of Claim 15 wherein pressure relief valves are disposed in discharge lines exiting said cylinders of different diameters.
- 17. (canceled) The windmill compressor apparatus of Claim 16 wherein the pressure relief valve for the cylinder with the largest diameter is set to be actuated at a pressure which is less than the pressure relief valve for the cylinder with the smaller diameter.
- 18. (canceled) The windmill compressor apparatus of Claim 13 wherein the drive means comprises a crank arm attached to the windmill shaft to rotate therewith; said crank arm having a portion thereof connected to the piston shafts to rotate said piston

shafts, thereby withdrawing and inserting the shafts with respect to the cylinders to compress air.

- 19. (canceled) The windmill compressor apparatus of Claim 13 wherein the crank arm has a portion thereof opposite to the end which is connected to the piston shafts, which portion acts as a counterbalance to the pistons.
- 20. (canceled) The windmill compressor apparatus as in Claim 13 further comprising multiple sets of three windmill blades.
- 21. (canceled) The windmill compressor apparatus of Claim 20 wherein the multiple sets of blades are attached to multiple hubs on said windmill shaft.
- 22. (canceled) The windmill compressor apparatus of Claim 21 wherein the blades in each set of windmill blades are interconnected with braces.
- 23. (canceled) A method of enhancing the performance of a windmill mounted to a windmill shaft to rotate said shaft in response to air flow through said windmill, comprising providing said windmill with multiple sets of three blades, said blades in a set being attached to one another and mounted to a single hub on said shaft.
- 24. (canceled) A windmill apparatus comprising:

windmill means mounted to a windmill shaft to rotate said shaft in response to air flow through said windmill means; the windmill means comprising multiple sets of three windmill blades wherein the blades are predominantly flat, of uniform cross-section, have a central portion ending in tips, and have a lip at one tip; the blades in a set further comprise a first blade that has a cord length "X" measured from tip to tip on a line parallel to the plane of the central portion; a second blade somewhat smaller in overall length than the first blade; and a third blade somewhat smaller in overall length than the second blade; the blades are positioned with respect to one another such that the center of the central portion of the first blade is spaced approximately 50% of the blade cord length "X" from the center to the center of the central portion of the second blade; and the second blade is positioned with respect to the third blade such that the center of the central portion of the second blade is spaced approximately 50% of the second

blade's cord length from the center to the center of the central portion of the third blade; the second blade is positioned with respect to the first blade with a 15 degree increased angle of attack greater than the angle of attack of the first blade to the direction of wind through the windmill; a tip of the second blade is positioned approximately 1/10th of the cord length "X" back from a tip on the first blade on a line taken perpendicular to the line parallel to the cord length "X"; said line passing through said tip on said first blade; the cord length of the second blade is approximately 70% of "X" and the third blade is dimensioned and positioned with respect to the second blade, with the same ratios as given with respect to the first and second blades.

- 25. (canceled) The method of Claim 23 wherein the blades of each set of windmill blades are positioned at an angle to one another.
- 26. (canceled) The method of Claim 23 wherein the blades of each set of windmill blades are positioned at an angle to the windmill shaft.
- 27. (canceled) The method of Claim 23 wherein the blades of each set of windmill blades are offset from the centerline of the windmill shaft.